

METHOD AND APPARATUS TO AUTOMATICALLY MAINTAIN LOOP ISOLATION IN POSITION VARIANT MRI COILS

Abstract

An RF coil loop assembly technique that maintains coil isolation at varying coil positions is presented. A mutual inductance compensation circuit connected in series with each RF coil loop of the coil loop assembly substantially minimizes the coupling, or mutual inductance, that forms between the RF coil loops. The mutual inductance of the compensation circuit substantially equals, and is opposite in phase or polarity, to the mutual inductance that forms between the RF coil loops as the RF coil loops move or rotate with respect to each other.